

550,439

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 October 2004 (07.10.2004)

PCT

(10) International Publication Number
WO 2004/085098 A2

(51) International Patent Classification⁷: **B22F**
(21) International Application Number:
PCT/US2004/009358
(22) International Filing Date: 26 March 2004 (26.03.2004)
(25) Filing Language: English
(26) Publication Language: English
(30) Priority Data:
60/458,227 27 March 2003 (27.03.2003) US

(71) Applicant (for all designated States except US): **PUR-
DUE RESEARCH FOUNDATION** [US/US]; 1291 Cum-
berland Avenue, West Lafayette, IN 47906 (US).

(71) Applicants and

(72) Inventors: **WEBSTER, Thomas, J.** [US/US]; 600 Rosa
LN., Lafayette, IN 47905 (US). **EJIOFOR, Jeremiah, U.**
[US/US]; 2501 Soldiers Home Rd #52C, West Lafayette,
IN 47905 (US).

(74) Agent: **GEREN, Gerald, S.**; Barnes & Thornburg, P.O.
Box 2786, Chicago, IL 60690 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB,
GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,
PT, RO, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: METALLIC NANOPARTICLES AS ORTHOPEDIC BIOMATERIAL

(57) Abstract: A composition for use as a prosthetic biomaterial and associated method. The biomaterial exhibits cytocompatibility, mechanical functionality and osteoblast adhesion between the implant and interfacing surface. The biomaterial is metallic, has a grain size less than about 500 nanometers and has a surface roughness of less than about 800 nm rms.

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